CLAIMS:

1. A honeycomb carrier for an exhaust gas-cleaning catalyst which is a honeycomb carrier to support a catalyst to clean an exhaust gas, characterized in that the material for the honeycomb carrier is an aluminum magnesium titanate sintered product obtained by firing at from 1,000 to 1,700°C a mixture comprising 100 parts by mass, as calculated as oxides, of a mixture comprising a Mg-containing compound, an Al-containing compound and a Ti-containing compound in the same metal component ratio as the metal component ratio of Mg, Al and Ti in an aluminum magnesium titanate represented by the empirical formula $Mg_xAl_{2(1-x)}Ti_{(1+x)}O_5$ (wherein $0<x<1$), and from 1 to 10 parts by mass of an alkali feldspar represented by the empirical formula $(Na_yK_{1-y})AlSi_3O_8$ (wherein $0\leq y\leq 1$).

2. A honeycomb carrier for an exhaust gas-cleaning catalyst which is a honeycomb carrier to support a catalyst to clean an exhaust gas, characterized in that the material for the honeycomb carrier is an aluminum titanate sintered product obtained by firing at from 1,250 to 1,700°C a raw material mixture comprising 100 parts by mass of a mixture (hereinafter referred to as component X) comprising TiO_2 and Al_2O_3 in a molar ratio of the former/the latter being 40 to 60/60 to 40, and from 1 to 10 parts by mass of an alkali feldspar represented by the empirical formula $(Na_yK_{1-y})AlSi_3O_8$ (wherein $0\leq y\leq 1$), an oxide of a spinel structure containing Mg, or MgO or a

Mg-containing compound which can be converted to MgO by firing (hereinafter referred to as component Y).

3. The honeycomb carrier for an exhaust gas-cleaning catalyst according to Claim 2, wherein the component Y is a mixture comprising an alkali feldspar represented by $(Na_yK_{1-y})AlSi_3O_8$ (wherein $0 \leqq y \leqq 1$), and an oxide of a spinel structure containing Mg and/or MgO or a Mg-containing compound which can be converted to MgO by firing.

4. The honeycomb carrier for an exhaust gas-cleaning catalyst according to any one of Claims 1 to 3, which has a wall thickness of from 0.05 to 0.6 mm, a cell density of from 15 to 124 cells/cm^2, a porosity of the partition wall of from 20 to 50%, and a thermal expansion coefficient of at most $3.0\times10^{-6}K^{-1}$.

5. The honeycomb carrier for an exhaust gas-cleaning catalyst according to any one of Claims 1 to 4, wherein the catalyst contains an alkali metal or alkaline earth metal component to remove NOx in the exhaust gas.

6. The honeycomb carrier for an exhaust gas-cleaning catalyst according to any one of Claims 1 to 5, wherein the exhaust gas is an exhaust gas of an automobile of a system wherein a fuel is directly jetted into an engine or of a system wherein a fuel is diluted and burned.

7. A process for producing a honeycomb carrier for an exhaust gas-cleaning catalyst, characterized by preparing a raw material mixture comprising 100 parts by mass, as calculated as oxides, of a mixture comprising a Mg-

containing compound, an Al-containing compound and a Ti-containing compound in the same metal component ratio as the metal component ratio of Mg, Al and Ti in an aluminum magnesium titanate represented by the empirical formula $Mg_xAl_{2(1-x)}Ti_{(1+x)}O_5$ (wherein $0<x<1$), and from 1 to 10 parts by mass of an alkali feldspar represented by the empirical formula $(Na_yK_{1-y})AlSi_3O_8$ (wherein $0\leq y\leq 1$), adding a molding assistant to the raw material mixture, followed by kneading to plasticize the raw material mixture to make it extrusion-processable, and then extrusion processing it into a honeycomb body, followed by firing at from 1,000 to 1,700°C.

8. A process for producing a honeycomb carrier for an exhaust gas-cleaning catalyst, characterized by preparing a mixture comprising 100 parts by mass of a mixture (hereinafter referred to as component X) comprising TiO_2 and Al_2O_3 in a molar ratio of the former/the latter being 40 to 60/60 to 40, and from 1 to 10 parts by mass of an alkali feldspar represented by the empirical formula $(Na_yK_{1-y})AlSi_3O_8$ (wherein $0\leq y\leq 1$), an oxide of a spinel structure containing Mg, or MgO or a Mg-containing compound which can be converted to MgO by firing (hereinafter referred to as component Y), adding a molding assistant to the mixture, followed by kneading to plasticize the mixture to make it extrusion-processable, and extrusion processing it into a honeycomb body, followed by firing at from 1,250 to 1,700°C.

9. The process for producing a honeycomb carrier for an exhaust gas-cleaning catalyst according to Claim 7 or 8, wherein the average particle size of each component contained in the raw material mixture is at most 10 μm.

10. A method for cleaning an exhaust gas, which comprises contacting the exhaust gas to a honeycomb carrier supporting a catalyst to clean an exhaust gas, characterized in that the material for the honeycomb carrier is an aluminum magnesium titanate sintered product obtained by firing at from 1,000 to 1,700°C a mixture comprising 100 parts by mass, as calculated as oxides, of a mixture comprising a Mg-containing compound, an Al-containing compound and a Ti-containing compound in the same metal component ratio as the metal component ratio of Mg, Al and Ti in an aluminum magnesium titanate represented by the empirical formula $Mg_xAl_{2(1-x)}Ti_{(1+x)}O_5$ (wherein $0<x<1$), and from 1 to 10 parts by mass of an alkali feldspar represented by the empirical formula $(Na_yK_{1-y})AlSi_3O_8$ (wherein $0\leq y\leq 1$).

11. A method for cleaning an exhaust gas, which comprises contacting the exhaust gas to a honeycomb carrier supporting a catalyst to clean an exhaust gas, characterized in that the material for the honeycomb carrier is an aluminum titanate sintered product obtained by firing at from 1,250 to 1,700°C a raw material mixture comprising 100 parts by mass of a mixture (hereinafter referred to as component X) comprising TiO_2 and Al_2O_3 in a

molar ratio of the former/the latter being 40 to 60/60 to 40, and from 1 to 10 parts by mass of an alkali feldspar represented by the empirical formula $(Na_yK_{1-y})AlSi_3O_8$ (wherein $0 \leqq y \leqq 1$), an oxide of a spinel structure containing Mg, or MgO or a Mg-containing compound which can be converted to MgO by firing (hereinafter referred to as component Y).